



NOTES:

1. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
A) CIMCOOL 5 STAR 49
B) TRIM SOL

2. ALL WELDS JOINING BELLOWS AND FLANGES ARE TO BE INTERNAL

3. BELLOWS ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2 X 10⁻¹⁰ STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS
ALCATEL SAM-110TCL
Du PONT CEC 24-120B
VARIAN MS-9, MS-90 OR MS-18

CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TRESTING.

FINAL TEST WILL CONSIST OF SURROUNDING THE ASSEMBLY (BAGGING) WITH HELIUM. THE ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION ON THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.

4. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.

5. DIMENSIONS IN [] ARE MILLIMETERS

REF. SOURCES

- 2 STANDARD BELLOWS CO.
375 TUNPIKE AVE.
WINDSOR LOCKS, CONN. 06096
- 1 MDC VACUUM PRODUCTS CORP.
23842 CABOT BLVD.
HAYWARD, CA. 94545-1651



3		ST'D. BELLOWS CAT. #220 - 104 - 5 - AA	WITH EXTENDED ENDS	1
2	MDC'S CAT. #100030	8" CF. ROTATABLE FLANGE		1
1	MDC'S CAT. #110030	8" CF. NONROTATABLE FLANGE		1
ITEM	SYM/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES TOLERANCES		THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY		
DECIMALS ANGLES X .03 [.7620] .25 XX .01 [.025] XXX .005 [.127]		A2173200		
SURFACE ROUGHNESS 125 ✓		DRWN BY MUSCIA	DATE 1/20/95	CHEF DESIGN ENGINEER D. SHU DATE 4/12/95
REMOVE ALL BURRS AND BREAK SHARP EDGES TO RAZ.		CHECKED BY D. SHU	DATE 4/12/95	OP LEADER T.M. KUZAY DATE 4/12/95
SURFACE FINISH TO BE IN ACCORDANCE WITH LATEST ASST 944		DESIGNER MUSCIA	DATE 4/12/95	PROJECT WORK
DIMENSIONS & TOLERANCES TO ACCORDANCE WITH LATEST ASST 944		RESPONSIBLE ENGINEER D. SHU	DATE 4/12/95	APPROVED/RELEASED
DO NOT SCALE DRAWING		MATERIAL SEE PARTS LIST		
SYN		CHANGE DESCRIPTION	BY	CHEK DATE
REVISIONS				
SCALE HALF		SHEET 1 of 1	SIZE C	DRAWING NUMBER P4105090702-730000-00